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Nov. 5, 2012

Ms. Marlene H. Dortch  
Secretary  
Federal Communications Commission  
445 12<sup>th</sup> Street, SW  
Washington, DC 20554

Re: **MPLS and the Assessment of Enterprise Services**

Universal Service Contribution Methodology, WC Docket No. 06-122  
A National Broadband Plan for Our Future, GN Docket No. 09-51

Dear Ms. Dortch:

AARP supports USF contribution methodology reform, and urges the Commission to undertake action that will assess all services that benefit from the USF program, especially in light of the expansion of the program to support broadband.

In its July 9, 2012 Comments AARP advocated for the assessment of enterprise services,<sup>1</sup> a position that was supported by numerous other parties.<sup>2</sup> The assessment of enterprise services, as noted in the FNPRM, is critical to the Commission's overall efforts to improve the efficiency, fairness, and sustainability of the fund.<sup>3</sup> As discussed in AARP's comments, enterprise services will benefit from the expanded availability of broadband, and thus should contribute to the contribution base.<sup>4</sup> An expanded contribution base is essential so that a fair burden is borne by all who benefit from the universal service program. Residential customers should not become the "contributor of last resort," an outcome that would become all the more likely if large portions of enterprise service revenues are exempted from contributing to the fund.

Clearly, the exemption of substantial portions of enterprise service revenues is precisely the outcome that will result if the Commission adopts a proposal advanced by Sprint Nextel Corporation; BT Global Services; NTT, America Inc.; XO Communications; Orange Business

<sup>1</sup> AARP Comments, ¶¶30-34. AARP Ex Parte, September 24, 2012

<sup>2</sup> Alexicon Telecommunications Consulting, p. 3; AT&T Comments, pp. 15-16; CenturyLink Comments, p. 6; COMPTEL Comments, pp. 8-9; GVNW Consulting, p. 9; MetroPCS Comments, p. 20; NASUCA Comments, p. 12; National Telephone Cooperative Association, et al., p. 25; RCA Comments, p. 6; Ad Hoc Telecommunications Users, p. 31; Time Warner Cable, Inc., p. 5; United States Cellular Corporation, pp. 29-30; USA Mobility Inc., p. 4; XO Comments, p. 8 (endorsing the assessment of enterprise services based on the MPLS Industry Group proposal); Verizon Comments (also endorsing the assessment of enterprise services based on the MPLS Industry Group proposal).

<sup>3</sup> FNPRM, ¶42.

<sup>4</sup> AARP Comments, ¶31; AARP Reply Comments, pp. 16-17.

Services; and Verizon (hereinafter MPLS Industry Group).<sup>5</sup> Under the MPLS Industry Group proposal, only the *access element* of MPLS-enabled services would be assessed for Universal Service purposes.<sup>6</sup>

AARP does not believe that the Commission should adopt the MPLS Industry Group proposal. There are fundamental weaknesses with the MPLS Industry Group proposal that result in it being inconsistent with the FNPRM's objectives of efficiency, fairness, and sustainability. Specifically, the MPLS Industry Group proposal would result in an inappropriate shifting of the burden of support toward residential customers. This outcome is certainly not fair, and also undermines the sustainability of the fund as the proposal results in a smaller base of assessable revenues. Furthermore, the MPLS Industry Group proposal does not result in an efficient outcome as it is based on an unreasonable proxy, and increases the likelihood of competitive distortions. These shortcomings will be described in more detail below.

### **The MARC Proxies Do Not Reasonably Reflect Access Costs**

A major shortfall of the MPLS Industry Group proposal arises due to the proposal to base assessment on "MPLS Accessible Revenue Component" (MARC) proxies. The MARC proxies are based on NECA tariff rates for Ethernet Transmission Services. The MPLS Industry Group argues that use of NECA tariff rates are "just and reasonable," thus resulting in the MARC proxies being "just and reasonable."<sup>7</sup> However, the "just and reasonable" nature of NECA Ethernet Transmission Service rates does not translate into an assessment that is just and reasonable. The MARC proxy assessment is not related to actual carrier revenues, thus resulting in a distorted outcome. To see this, consider the following description of an MPLS-based VPN service:

AT&T's VPN technology is built on a Multiprotocol Label Switching (MPLS) architecture, which is a very powerful and advanced way of merging different types of traffic, such as voice and data, over one network.

AT&T's VPN technology provides business customers a single network that is highly secure and can expand as their business grows, to ensure all critical business functions – from customer service to order processing, procurement, etc. – can coexist on the same Virtual Private Network. *AT&T, customers can access their VPN using virtually any access technology, such as cellular, Wi-Fi, Ethernet, DSL, Frame Relay ATM or PPP.* Because of its flexibility, AT&T's VPN customers can easily add on applications, such as Voice over IP, video, remote access and hosting – all designed to help customers grow and expand their businesses and operate more cost-effectively.<sup>8</sup>

AT&T's service description illustrates a key problem with the MPLS Industry Group's MARC proxy. MPLS-based services can be accessed by a wide variety of technologies. The MARC

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<sup>5</sup> Letter to Marlene H. Dortch, March 29, 2012, from Sprint Nextel, BT Global Services, NTT, America Inc., XO Communications, Orange Business Services, and Verizon in WC Docket No. 06-122.

<sup>6</sup> Letter to Marlene H. Dortch, March 29, 2012, from Sprint Nextel, BT Global Services, NTT, America Inc., XO Communications, Orange Business Services, and Verizon in WC Docket No. 06-122, p. 6.

<sup>7</sup> Letter to Marlene H. Dortch, March 29, 2012, from Sprint Nextel, BT Global Services, NTT, America Inc., XO Communications, Orange Business Services, and Verizon in WC Docket No. 06-122, p. 8.

<sup>8</sup> "AT&T VPN Snapshot," emphasis added. [http://www.att.com/Common/merger/files/pdf/VPN\\_Snapshot.pdf](http://www.att.com/Common/merger/files/pdf/VPN_Snapshot.pdf)



proxy advocated by the MPLS Industry Group ignores this distinction. For example, accessing an IP VPN network through a wireless LTE network<sup>9</sup> would result in very different access costs than those captured by the MARC proxy. Because the MARC proxies are based on NECA Ethernet Transport Service tariffed rates, a potential distortion arises given differing actual costs of access.

### **The MPLS Industry Group Proposal Results in Competitive Distortion**

The primary problem with the approach advocated by the MPLS Industry Group is that it will generate competitive distortion. The proposal focuses on a specific technology, which competes with other technologies to deliver enterprise services which are, from the user's perspective, very similar, if not identical. For example, an IP VPN that is built on an MPLS foundation provides a service that is similar to software-based VPN that sends encoded data over the public Internet. As noted by an industry observer:

The key thing to remember about MPLS is that it's a technique, not a service — so it can be used to deliver anything from IP VPNs to Metro Ethernet services, or even to provision optical services. So although carriers build MPLS backbones, the services that users buy may not be called MPLS. *They could be called anything from IP VPN to Metro Ethernet — or whatever the carriers' marketing departments dream up next.*<sup>10</sup>

Because MPLS is a technology platform upon which a variety of services can be built, the MPLS Industry Group proposal would essentially carve out a protected zone for any enterprise service based on that technology platform. Other legacy technologies (or yet-to-be implemented technologies) that deliver competing services or applications to customers would not be subject to the exemption, thus undermining competitive neutrality. Because the core of the MPLS Industry Group proposal is to enable an "opt-out" process for the actual enterprise services that utilize MPLS, the proposed outcome undermines the Commission's longstanding objectives of competitive neutrality.<sup>11</sup>

That MPLS is enabling enterprise services that are much more than the access element is clear from carrier service descriptions. For example, XO states in its marketing descriptions:

With the emergence of converged IP services, businesses today are demanding greater performance from their networks than ever before. That's the appeal of XO MPLS IP-VPN Service. It's a network-based, MPLS-enabled Wide Area Network (WAN) solution that offers multi-site businesses more bandwidth for the dollar, faster application deployment, lower network operating costs, and more access options than traditional

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<sup>9</sup> "Verizon's IP VPN Opens a New World of Wireless Possibilities," *CIO*, April 19, 2012.

[http://www.cio.com/article/704595/Verizon\\_s\\_IP\\_VPN\\_Opens\\_a\\_New\\_World\\_of\\_Wireless\\_Possibilities](http://www.cio.com/article/704595/Verizon_s_IP_VPN_Opens_a_New_World_of_Wireless_Possibilities)

<sup>10</sup> Johnson, J. "MPLS explained," *Network World*, March 29, 2007, (emphasis added).

<http://www.networkworld.com/research/2007/040207-mpls-migration-explained.html>

<sup>11</sup> In implementing section 254(b) of the 1996 Act, the Commission, based on the recommendation of the Federal-State Universal Service Joint Board, adopted the additional principle of competitive neutrality. See 47 U.S.C. §§ 254(b)(4), 254(d); See also, *In the Matter of Federal-State Joint Board on Universal Service*, CC Docket 96-45, Report and Order, May 8, 1997, FCC 97-157, ¶47.

WAN services. Plus, XO offers competitive service Level Agreements on packet loss and jitter.<sup>12</sup>

Clearly, the MPLS-enabled service described by XO is much more than an access element, and it competes with other, non-MPLS-based services that provide similar functionality. However, with the MPLS Industry Group proposal, the assessment of MPLS-based enterprise services would extend no further than the MARC proxy for the access element. As a result, the MARC proxy essentially provides a "buffer zone" around the MPLS-based enterprise service revenues, leaving the enterprise service itself unassessed.

### **The Commission Should Exercise its Permissive Authority and Assess Enterprise Services**

The MPLS Industry Group argues that the Commission should exercise its permissive authority to enable the assessment of the *access transmission* component of MPLS-enabled services.<sup>13</sup> However, MPLS Industry Group also advances a more general argument that supports the assessment of all enterprise service revenues. Pointing to the Commission's decision to assess interconnected VoIP services,<sup>14</sup> MPLS Industry Group goes on to reason:

The Commission could apply this framework to MPLS-enabled services. First, like interconnected VoIP services, the Commission could find that MPLS-enabled services incorporate an access transmission component whether or not the services are considered integrated information services. Second, like companies offering interconnected VoIP services, the Commission could find that companies offering MPLS-enabled services could properly be understood to "provide" the underlying telecommunications, even if they are only "offering" integrated information services. As with interconnected VoIP services, the transmission is an element of the finished service. Finally, like interconnected VoIP services, the Commission could find that MPLS-enabled services are likely to involve significant interstate communications, giving rise to revenues suitable for USF assessment. . . .<sup>15</sup>

As was discussed above, MPLS is simply a technique, and the logic for the assessment of services based on other techniques is the same. The Commission can and should exercise its permissive authority over enterprise services that are MPLS-based services, or enterprise services based on other technology platforms. The types of enterprise services discussed in the FNPRM certainly will benefit from the expanded availability of broadband, and should be required to contribute.

### **Conclusion**

In its opening comments, MetroPCS correctly framed the issue of the assessment of enterprise services in terms of network effects (the approach advocated by AARP), and also raises the issue of competitive neutrality:

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<sup>12</sup> <http://www.xo.com/services/network/mpls-ipvpn/Pages/overview.aspx>

<sup>13</sup> Letter to Marlene H. Dortch, March 29, 2012, from Sprint Nextel, BT Global Services, NTT, America Inc., XO Communications, Orange Business Services, and Verizon in WC Docket No. 06-122, p. 9.

<sup>14</sup> Letter to Marlene H. Dortch, March 29, 2012, from Sprint Nextel, BT Global Services, NTT, America Inc., XO Communications, Orange Business Services, and Verizon in WC Docket No. 06-122, pp. 10-11.

<sup>15</sup> Letter to Marlene H. Dortch, March 29, 2012, from Sprint Nextel, BT Global Services, NTT, America Inc., XO Communications, Orange Business Services, and Verizon in WC Docket No. 06-122, pp. 11-12, footnotes omitted.



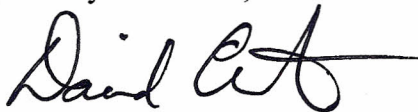
[E]ach of these enterprise services – whether provided via IP-based infrastructure or traditional switched circuits – benefits from the ubiquity of the national communications network. And, importantly, each of these services contains a telecommunications component. In order to equitably broaden the USF contribution base, the Commission should determine that enterprise services such as Dedicated IP, Virtual Private Networks (“VPN”), Wide Area Networks (“WAN”), among other traditional enterprise services, each include a telecommunications component and, therefore, are required to contribute to the USF. This will level the playing field between competing enterprise service providers, and between enterprise service providers and other providers of traditional telecommunications services that compete in this space.<sup>16</sup>

As also noted by National Cable and Telecommunications Association (NCTA), exempting MPLS-based enterprise services creates a distortion, “Exempting those services from contribution merely because they use MPLS technology would provide those companies with an artificial competitive advantage that is unwarranted.”<sup>17</sup> These observations support the proposition that enterprise services, MPLS-based or otherwise, should be assessed.

Adopting the MPLS Industry Group’s proposal would result in a distorted outcome that would allow entities utilizing MPLS to avoid assessment for services that provide functionality that is similar to that available from non-MPLS-based services. The proposed MARC proxies would add another layer of distortion as all access, regardless of its actual cost, would be assessed using the same rate structure. The Commission should reject the MPLS Industry Group proposal and assess all enterprise services.

Supporting broadband without expanding the contribution base to include broadband, one-way VoIP, text messaging, and enterprise services will lead to older households shouldering an unfair and an inequitable share of USF assessments. In fact, compared to younger households, older households currently subscribe to assessed wireless and wireline services at a higher rate, and to unassessed broadband service at a lower rate. AARP reiterates that extending support to broadband without expanding the contribution to include broadband, text messaging, one-way VoIP, and enterprise services will also threaten the overall sustainability of the fund.

Respectfully Submitted,



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Government Affairs

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<sup>16</sup> MetroPCS Comments, p. 20.

<sup>17</sup> National Cable and Telecommunications Association Comments, p. 11.